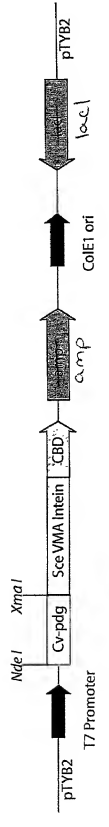

Fig. 1

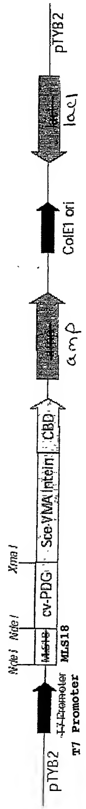
pTYB2
T7 Promoter
NdeI
NdeI
MLS18
cv-PDG
XmaI
Sce-VMA Intein
CBD
amp
ColE1 ori
lacI
pTYB2

Fig. 2


pTYB2
T7 Promoter
lacO
MCS18
Nde I
Xma I
Cx-PDG
Sce VMA Intein
CBD
c-myc
ColE1 ori
Amp
pTYB2

Fig. 3

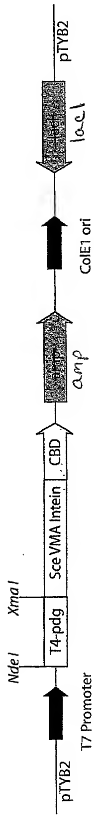
pTYB2
T7 Promoter
Nde I
Xma I
T4-pdg
Sce VMA Intein
CBD
amp
ColE1 ori
lacI
pTYB2

Fig. 4

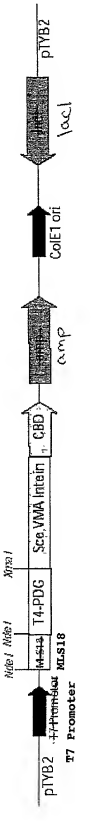
pTYB2
T7 Promoter
Nde I
Nde I
T4-PDG
Xma I
Sce.VMA intein
CBD
amp
CoIE1 ori
lac I
pTYB2

Fig. 5

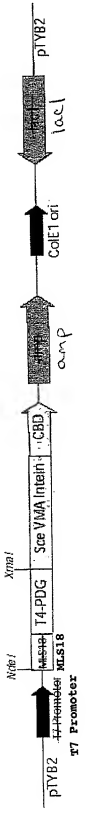
pTYB2
T7 Promoter
T7 Promoter
Xba1
MCS10
MCS18
Nde1
T4-PDG
Xma1
Sce VMA Intein
CBD
amp
ColE1 ori
lacI
pTYB2

Fig. 6

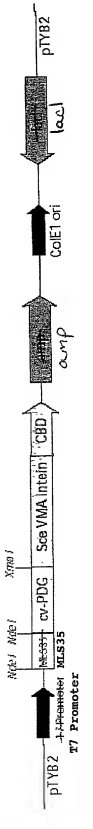

Fig. 7


pTYB2
T7 Promoter
T7 Terminator
Nde I
MCS**
MLS35
cv-PDG
Xma I
Sce VMA Intein
CBD
Amp
ColE1 ori
lacI
pTYB2

Fig. 8

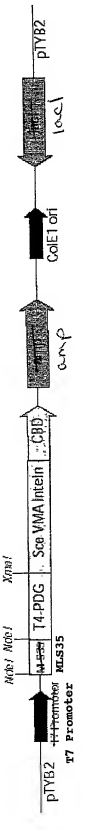
pTYB2
T7 Promoter
+1 Promoter
MCS35
Nde1
Nde1
T4-PDG
Xma1
Sce VMA Intein
CBD
amp
ColE1 ori
lacI
pTYB2

Fig. 9

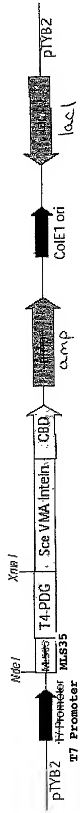
pTYB2
T7 Promoter
Nde I
MLS35
T4-PDG
Xba I
Sce VMA Intein
CBD
amp
ColE1 ori
lacI
pTYB2

Fig. 10

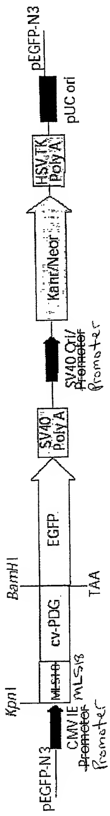
pEGFP-N3
CMV IE Promoter
KpnI
cv-PDG
BamHI
TAA
EGFP
SV40 Poly A
SV40 Ori/ Promoter
Kanr/Neor
HSV TK Poly A
pUC ori
pEGFP-N3

Fig. 11

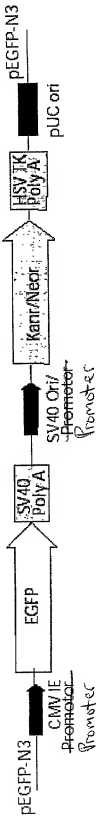

Fig. 12

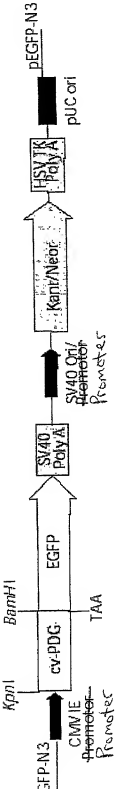
pEGFP-N3
CMV IE Promoter
KpnI
cv-PDG
BamHI
EGFP
TAA
SV40 PolyA
SV40 Ori/ Enhancer Promoter
Kan/Neor
HSV TK PolyA
pUC ori
pEGFP-N3

Fig. 13

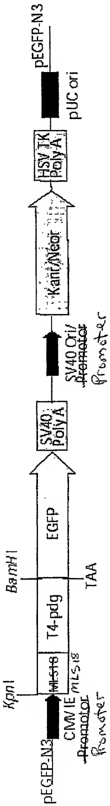
pEGFP-N3
CMV IE Promotor Promoter
KpnI
MLS18
T4-pdg
BamHI
TAA
EGFP
SV40 Poly A
SV40 Ori/ Promotor Promoter
Kanr/Neor
HSV TK Poly A
pUC ori
pEGFP-N3

Fig. 14

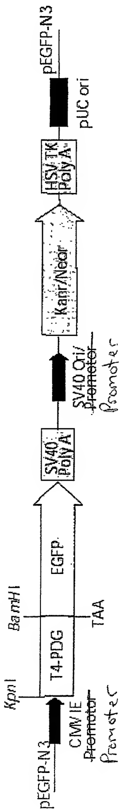
pEGFP-N3
CMV IE
Promoter
Promoter
KpnI
T4-PDG
BamHI
TAA
EGFP
SV40
Poly A
SV40 Ori/
Promoter
Promoter
Kanr/Neor
HSV TK
Poly A
pUC ori
pEGFP-N3

Fig. 15

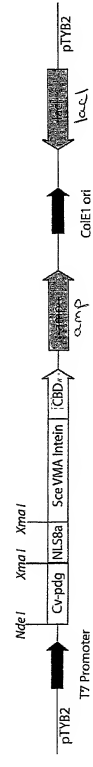
pTYB2
T7 Promoter
Nde I
Cv-pdg
Xma I
NLS8a
Xma I
Sce VMA Intein
CBD
amp
ColE1 ori
lacI
pTYB2

Fig. 16

pTYB2
T7 Promoter
Nde I
T4-pdg
Xma I
NLS8a
Xma I
Sce VMA Intein
CBD
CamR
ColE1 ori
lacI
pTYB2

Fig. 17

Title: DNA REPAIR POLYPEPTIDES AND METHODS OF USE
Applicant(s): Robert Stephen Lloyd and Amanda K. McCullough
Serial No.: Not yet assigned Filed: Even date herewith Docket: 265.0017.0101
Express Mail No.: EL776903702US Sheet 18 of 25

Fig. 18


pTYB2
T7 Promoter
NdeI
T4-pdg
XmaI
NLS8b
XmaI
SceVMA Intein
CBD
Amp
ColE1 ori
lacI
pTYB2

Fig. 19

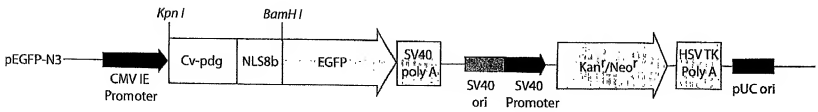

Fig. 20

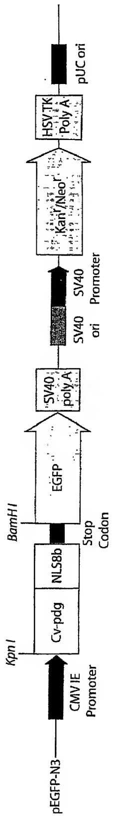
pEGFP-N3
CMV IE Promoter
Kpn I
Cv-pdg
NLS8b
Stop Codon
BamH I
EGFP
SV40 poly A
SV40 ori
SV40 Promoter
Kanr/Neor
HSV TK Poly A
pUC ori

Fig. 21

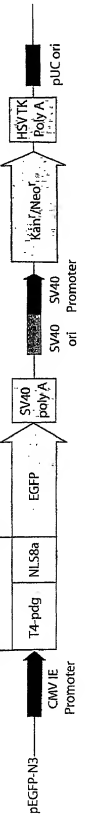

Fig. 22

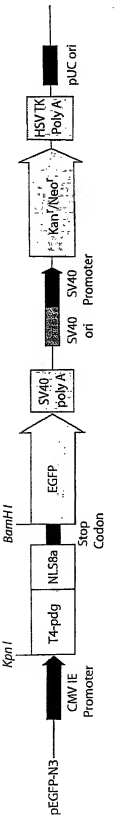
pEGFP-N3
CMV IE Promoter
Kpn I
T4-pdg
NLS8a
BamH I
Stop Codon
EGFP
SV40 poly A
SV40 ori
SV40 Promoter
Kan r/Neo r
HSV TK Poly A
pUC ori

Fig. 23

SEQ ID NO:41;
MTRVNLVPVQELADQHLMAEFRELKMIPKALARSLRTQSSEKILKKIPSKFTLNTGHVLFFYDKGKYLQQRYDEIVVELVDRGYKINVDAKLDPDNVMTGEWYNDYT
PTEDAFNIIRARIAEKIAMKPSFYRFTKAKTSNN

SEQ ID NO:42;
MTRINLTLVSELADQHLMAEYRELPRVFGAVRKHVANGKRVRDFKISPTFILGAGHVTFFYDKLEFLRKRQIELIAECLKRGFNIKDTTVQDISDIPQEFRGDYIPH
EASIAISQARLDEKIAQRPTWYKYYGKAIYA

SEQ ID NO:43;
METESTGTPTGETRLALVRRARRIDRILAETYPYAVAELDFETPFELLVATVLSAQTTDVRVNAATPALFARFPDAHAMAAATEPELQELVRSTGFYRNKASAILRL
SQELVGRHDGEVPARLEDLVALPGVGRKTAFVVLGNAFGQPGITVDTHFGRLARRLGFTDETDPGKGRARRGRPVPPARDWTMLSHRLIFHGRRVCHARRPACGRCP
IARWCPSYAAGETDPERARALLAYELKPGREELLELLRAGRTAGAAGPRPRAGG

Fig. 24

Title: DNA REPAIR POLYPEPTIDES AND METHODS OF USE
Applicant(s): Robert Stephen Lloyd and Amanda K. McCullough
Serial No. Not yet assigned
Express Mail No. EL776903702US
Filed: Even date herewith
Docket: 265.0017.0101
Sheet 24 of 25

SEQ ID NO:44;

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  1 atgacacgtg tgaatctcgt accggttcaa gaattagctg accagcatct catggcagaa
 61 tttcgtgaac ttaagatgat tccgaaggca ctcgcaagaa gtcttcgaac tcaatcgtcc
121 gaaaaaatat tgaagaagat cccatcaaaa tttactctga acactggtca tgttctgttc
181 ttttacgata aaggcaagta tttgcaacaa cgatacgacg aaattgtcgt tgaacttgtt
241 gatagggggt ataagataaa cgttgacgct aaactcgacc ctgataacgt gatgacggga
301 gagtggtaca atgattacac cccaacagaa gatgcgttta atattattcg agcgaggatt
361 gccgaaaaaa tcgctatgaa gccaagtttt tacaggttca cgaaagctaa aaccagcaat
421 aattaa
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SEQ ID NO:45;

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 61 tatcgtgaat tgccgcgtgt ttttggtgca gttcgtaagc atgttgctaa cggtaaacgt
121 gttcgtgatt ttaaaatcag tcctactttt atccttggcg caggtcatgt tacattcttt
181 tacgataagc tcgagttctt acgtaaacgt caaattgagc ttatagctga atgtttaaaa
241 cgtggtttta atatcaagga tactacagtc caggatatta gtgatattcc tcaggaattc
301 cgtggtgatt atattcccca tgaagcttct attgctatat cacaagctcg tttagatgaa
361 aaaattgcac aacgtcctac ttggtacaaa tactacggta aggcgattta tgcataa
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SEQ ID NO:46;

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121 acgggcacgc cgaccgggga gacccggctg gccctggtgc gccgggcgcg gcggatcgac
181 cggatcctgg ccgagacgta cccgtacgcc gtcgccgagc tggacttcga gacgccgttc
241 gagctgctcg tggccacggt gctgtccgcc cagaccaccg acgtgcgggt caacgcagcc
301 acgccggcgc tgttcgcccg cttcccggat gcccacgcga tggccgcggc caccgagccc
361 gagctgcagg agctcgtgcg ctccacgggg ttctaccgga acaaggcctc cgcgatcctg
421 cggctgtccc aggagctcgt gggccggcac gacggcgagg tcccccgccg tctcgaggac
481 ctcgtggcgc tgcccggggt gggccgcaag accgcgttcg tggtgctcgg caacgccttc
541 ggccagcccg ggatcaccgt ggacacgcac ttcggccggc tcgcccggcg cctggggttc
601 acggacgaga ccgacccggg taaaggtcga gcacgccgtg ggcgccctgt tcccccccgcc
661 cgggactgga cgatgctctc ccaccggctg atcttccacg gccgccgcgt gtgccacgcg
721 cgccgcccgg cgtgcgggcg gtgcccgatc gcccgctggt gcccgtccta cgccgcgggg
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841 gagctgctcg agctcctgcg cgcggggcgg acggcgggag ctgcggggcc tcggccacgg
901 gctggaggct gagcgcccgg cctgcccgct cagccttttc ggtgagaccc gcgagatcgc
961 gaccgccg
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Fig. 25